

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
in and for the STATE OF UTAH

IN THE MATTER OF THE APPLICATION)	
OF BELCO PETROLEUM CORPORATION)	ORDER
FOR AN ORDER ESTABLISHING DRILLING)	
UNITS FOR CERTAIN LANDS SITUATED)	CAUSE NO. 187-2
IN UINTAH COUNTY, UTAH)	

Pursuant to the application of Belco Petroleum Corporation, this cause came on for consideration and determination by the Board of Oil, Gas and Mining, pursuant to Section 40-6-6, Utah Code Annotated, 1953, on Wednesday, August 20, 1980, in the Wildlife Resources Auditorium, 1596 West North Temple, Salt Lake City, Utah.

The following Board Members were present for the hearing:

Charles R. Henderson, Chairman

Thadis W. Box

C. Ray Juvelin

E. Steele McIntyre

John L. Bell

Edward T. Beck

Maxilian A. Farbman

Also present and representing the applicant:

James Patrick Miller, Attorney, Belco Petroleum Corporation

Donald J. McKenna, Geologist, Belco Petroleum Corporation

NOW, THEREFORE, the Board, having considered the testimony adduced, and the exhibits received at said hearing, and being fully advised in the premises, now makes and enters the following:

FINDINGS

(1) Due and regular notice of the time, place and purpose of the hearing was given to all interested parties in the form and manner and within the time required by law and the rules and regulations of the Board.

(2) The Board has jurisdiction over the matter covered by said application and over all parties interested therein and has jurisdiction to make and promulgate the Order hereinafter set forth.

(3) The application was amended at the hearing to omit sections 28 and 29 of Township 8 South, Range 22 East from such application. These two sections are currently within the unit boundaries of the Glen Bench Unit, Pacific Transmission Supply, Operator, and well spacing for these sections will be controlled by the U.S. Geological Survey under terms of the unit agreement.

(4) That geologic mapping based on surface geology, as well as subsurface well control, has defined a number of northwest/southeast trending tear faults. Movement along these faults is predominantly strike dip resulting in vertical displacement across the faults.

(5) The most of the gas production in the area is obtained from the Wasatch formation which consists of 2,560 to 3,000 feet of interbedded lenticular sands, shales, siltstones and minor limestones.

(6) That subsurface correlations indicate that the Wasatch sands were deposited in stream channel and deltaic environments and that said sands are extremely lenticular and discontinuous.

(7) That the discontinuity of these individual sand reservoirs is confirmed by the fact that, in many cases, the sand which is productive in one well is not present in offset wells.

(8) That most Wasatch sands are tight with extremely low permeability and deliverability.

CONCLUSIONS

(1) That due to the discontinuity and extreme lenticularity of the Wasatch formation sands, 640 acres is not drained by one well and 320 acres would, at this time, be more adequate for development of the Wasatch formation.

(2) That 320 acre spacing would prevent waste of oil and gas, avoid the drilling of unnecessary wells and protect correlative rights of all parties holding interests in the area.

ORDER

(1) That the following described lands be spaced on 320 acres for drilling of gas wells in the Wasatch formation:

Township 4 South, Range 3 East
Sections 32 & 33

Township 8 South, Range 20 East
Sections 22, 23, 24, 25, 26, 27

Township 8 South, Range 21 East
Sections 25, 26, 27, 28 & S/2
only of the following sections:
19, 20, 21, 22, 23, & 24, except
that portion of the Stagecoach Unit
lying within the S/2 of Section 23.

Township 8 South, Range 22 East
Sections 32 & 33

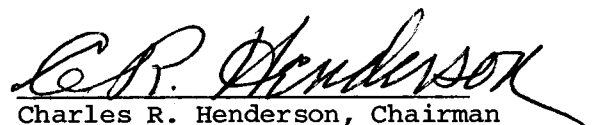
Township 9 South, Range 20 East
Sections 8, 9, 10, 11, 16 & 17,
less the River Junction Unit
lying within Section 8.

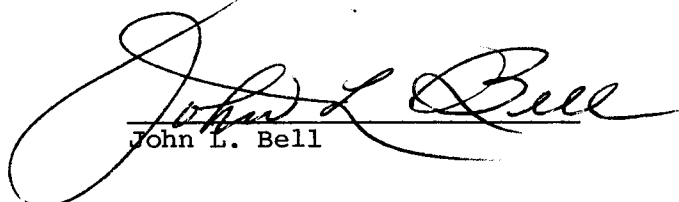
(2) Said drillsite location shall be the NW/4 and the SE/4 of each governmental section with the 320 acre drilling unit being either vertical or horizontal at Operator's option.

(3) No well shall be located closer than 660 feet to the lease line or spacing unit line except if the spacing unit offsets a federal units and such federal unit has a well located closer than 660 feet to the unit line, said well for the spacing unit may be located equidistant from the unit line.

DATED this 20th day of August, 1980.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING

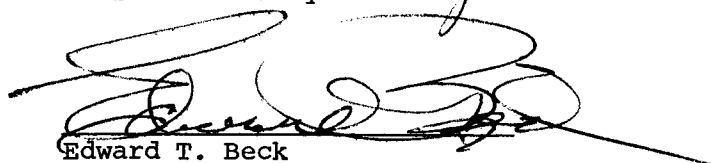

Charles R. Henderson, Chairman


John L. Bell

Thadis W. Box

C. Ray Juvelin


E. Steele McIntyre


Edward T. Beck

Maxilian A. Farbman

10000 Old Katy Road
Suite 100
Houston, Texas 77055
Telephone (713) 932-4700
Cable: BELPETEX

Belco Petroleum Corporation

Belco

September 12, 1980

Mr. Cleon Feight
Board of Oil, Gas and Mining
State of Utah
1588 West North Temple
Salt Lake City, Utah 84116

RE: Cause No. 187-2

Dear Jack:

Attached is a copy of an order I have drafted for our 320 acre spacing hearing in August. Would you please review this Order and if you feel it needs any changes, I have kept a copy and will be pleased to rewrite it. Since the Commission meets on the 25th, any changes you have we should probably discuss on the telephone so that the proper order may be in your hands before the 25th.

Yours very truly,

BELCO PETROLEUM CORPORATION


James Patrick Miller

JPM:ry
Encl.

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SEP 15 1980

DIVISION OF
OIL, GAS & MINING

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
IN AND FOR THE STATE OF UTAH

IN THE MATTER OF THE APPLI-)
CATION OF BELCO PETROLEUM)
CORPORATION FOR AN ORDER)
ESTABLISHING DRILLING UNITS)
FOR CERTAIN LANDS SITUATED)
IN UINTAH COUNTY, UTAH.)

ORDER
CAUSE NO. 187-2

PURSUANT TO THE APPLICATION OF BELCO PETROLEUM CORPORATION,
THIS CAUSE CAME ON FOR CONSIDERATION BY THE BOARD OF OIL, GAS
AND MINING PURSUANT TO RULE C-3 OF THE BOARD OF OIL, GAS AND
MINING, GENERAL RULES AND REGULATIONS ON WEDNESDAY, AUGUST 20,
1980, IN THE WILDLIFE RESOURCES AUDITORIUM, 1596 WEST NORTH
TEMPLE, SALT LAKE CITY, UTAH.

THE FOLLOWING BOARD MEMBERS WERE PRESENT FOR THE HEARING:

C. R. HENDERSON, CHAIRMAN
THADIS BOX, BOARD MEMBER
C. RAY JUVELIN, BOARD MEMBER
E. STEELE MCINTYRE, BOARD MEMBER
JOHN BELL, BOARD MEMBER
EDWARD T. BECK, BOARD MEMBER
MAXILIAN A. FARBMAN, BOARD MEMBER

ALSO PRESENT AND REPRESENTING THE APPLICANT:

JAMES PATRICK MILLER, ATTORNEY, BELCO PETROLEUM
CORPORATION
DONALD J. MCKENNA, GEOLOGIST, BELCO PETROLEUM
CORPORATION

NOW, THEREFORE, THE BOARD HAVING CONSIDERED THE TESTI-
MONY ADDUCED, AND THE EXHIBITS RECEIVED AT SAID HEARING, AND
BEING FULLY ADVISED IN THE PREMISES, NOW MAKES AND ENTERS THE
FOLLOWING:

FINDINGS

(1) DUE AND REGULAR NOTICE OF THE TIME, PLACE AND PURPOSE OF THE HEARING WAS GIVEN TO ALL INTERESTED PARTIES IN THE FORM AND MANNER AND WITHIN THE TIME REQUIRED BY LAW AND THE RULES AND REGULATIONS OF THE BOARD.

(2) THE BOARD HAS JURISDICTION OVER THE MATTER COVERED BY SAID APPLICATION AND OVER ALL PARTIES INTERESTED THEREIN AND HAS JURISDICTION TO MAKE AND PROMULGATE THE ORDER HEREINAFTER SET FORTH.

(3) THE APPLICATION WAS AMENDED AT THE HEARING TO OMIT SECS. 28 AND 29 OF TOWNSHIP 8 SOUTH, RANGE 22 EAST FROM SUCH APPLICATION. THESE TWO SECTIONS ARE CURRENTLY WITHIN THE UNIT BOUNDARIES OF THE GLEN BENCH UNIT, PACIFIC TRANSMISSION SUPPLY, OPERATOR, AND WELL SPACING FOR THESE SECTIONS WILL BE CONTROLLED BY THE U. S. GEOLOGICAL SURVEY UNDER TERMS OF THE UNIT AGREEMENT.

(4) THAT GEOLOGIC MAPPING BASED ON SURFACE GEOLOGY, AS WELL AS SUBSURFACE WELL CONTROL, HAS DEFINED A NUMBER OF NORTH-WEST/SOUTHEAST TRENDING TEAR FAULTS. MOVEMENT ALONG THESE FAULTS IS PREDOMINANTLY STRIKE DIP RESULTING IN VERTICAL DISPLACEMENT ACROSS THE FAULTS.

(5) THAT MOST OF THE GAS PRODUCTION IN THE AREA IS OBTAINED FROM THE WASATCH FORMATION WHICH CONSISTS OF 2,560 TO 3,000 FEET OF INTERBEDDED LENTICULAR SANDS, SHALES, SILTSTONES AND MINOR LIMESTONES.

(6) THAT SUBSURFACE CORRELATIONS INDICATE THAT THE WASATCH SANDS WERE DEPOSITED IN STREAM CHANNEL AND DELTAIC ENVIRONMENTS AND THAT SAID SANDS ARE EXTREMELY LENTICULAR AND DISCONTINUOUS.

(7) THAT THE DISCONTINUITY OF THESE INDIVIDUAL SAND RESERVOIRS IS CONFIRMED BY THE FACT THAT, IN MANY CASES, THE SAND WHICH IS PRODUCTIVE IN ONE WELL IS NOT PRESENT IN OFFSET WELLS.

(8) THAT MOST WASATCH SANDS ARE TIGHT WITH EXTREMELY LOW PERMEABILITY AND DELIVERABILITY.

CONCLUSIONS

(1) THAT DUE TO THE DISCONTINUITY AND EXTREME LENTICULARITY OF THE WASATCH FORMATION SANDS, 640 ACRES IS NOT DRAINED BY ONE WELL AND 320 ACRES WOULD, AT THIS TIME, BE MORE ADEQUATE FOR DEVELOPMENT OF THE WASATCH FORMATION.

(2) THAT 320 ACRE SPACING WOULD PREVENT WASTE OF OIL AND GAS, AVOID THE DRILLING OF UNNECESSARY WELLS AND PROTECT CORRELATIVE RIGHTS OF ALL PARTIES HOLDING INTERESTS IN THE AREA.

ORDER

(1) THAT THE FOLLOWING DESCRIBED LANDS BE SPACED ON 320 ACRES FOR DRILLING OF GAS WELLS IN THE WASATCH FORMATION:

TOWNSHIP 4 SOUTH, RANGE 3 EAST
SECTIONS 32 & 33

TOWNSHIP 8 SOUTH, RANGE 20 EAST
SECTIONS 22, 23, 24, 25, 26, 27

TOWNSHIP 8 SOUTH, RANGE 21 EAST
SECTIONS 25, 26, 27, 28 & S/2
ONLY OF THE FOLLOWING SECTIONS:
19, 20, 21, 22, 23, & 24, EXCEPT
THAT PORTION OF THE STAGECOACH UNIT
LYING WITHIN THE S/2 OF SEC. 23.

TOWNSHIP 8 SOUTH, RANGE 22 EAST
SECTIONS 32 & 33

TOWNSHIP 9 SOUTH, RANGE 20 EAST
SECTIONS 8, 9, 10, 11, 16 & 17,
LESS THE RIVER JUNCTION UNIT LY-
ING WITHIN SECTION 8

(2) SAID DRILLSITE LOCATION SHALL BE THE NW/4 AND THE SE/4 OF EACH GOVERNMENTAL SECTION WITH THE 320 ACRE DRILLING UNIT BEING EITHER VERTICAL OR HORIZONTAL AT OPERATOR'S OPTION.

(3) No well shall be located closer than 660' to the lease line or spacing unit line except if the spacing unit offsets a federal unit and such federal unit has a well located closer than 660' to the unit line, said well for the spacing unit may be located equidistant from the unit line.

DATED THIS _____ DAY OF SEPTEMBER, 1980.

C. R. HENDERSON, CHAIRMAN

THADIS BOX

C. RAY JUVELIN

E. STEELE MCINTYRE

JOHN BELL

EDWARD T. BECK

MAXILIAN A. FARBMAN